

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of)	
)	
Reassessment of Federal Communications)	ET Docket No. 13-84
Commission Radiofrequency Exposure Limits and)	
Policies)	
)	
Proposed Changes in the Commission’s Rules)	ET Docket No. 03-137
Regarding Human Exposure to Radiofrequency)	
Electromagnetic Fields)	
)	

To: Office of the Secretary
Federal Communications Commission
Washington, DC 20554

Comment Filed by: Susan Lippman
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September 3, 2013

My concerns about cell phone usage and the generally increasing levels and frequencies of all kinds of background electromagnetic radiation has become greater, not less, over the years as I have become aware of more and more books and solid scientific articles on the

subject. I am especially concerned with long-term effects since I see a younger generation with very high levels of exposure, since they have started cell phone use at an early age, use their cells right next to their heads, talk long and often, carry them in their pockets constantly when not talking or texting, and often keep them in arm's reach all night, also. I am 64 and have a twenty-year-old daughter.

Moreover I have some personal friends who are electro-sensitive and who have had to retreat to a small town in Colorado. Even there, they cannot hide. Austin is becoming more "wired" all the time, and when I see the intense effects that affect certain sensitive people, it makes me wonder what it is doing to the rest of us over sustained years of exposure. From what I have read and gleaned from talks and videos, I feel that the research—in particular, the independent, scientific peer-reviewed and non-industry-funded research—raises very considerable issues regarding threats to the health of all of us. I conclude that the health detriments are extremely probable, not just "possible," and warrant adopting many kinds protective policies.

Far too often, in fact—I'm sorry to say—USUALLY, we as a society have allowed health issues, like tobacco, DDT, air pollution, or new drugs, to continue to injure us until it is proven, epidemiologically, that there are serious health-damaging results. I feel that at this time, we have already "loaded the pipeline" with many future brain cancers, behavioral disabilities and other injuries due to the amount of microwave radiation exposure of the current generation. My husband's first wife recently died of a brain cancer, and it was a terrible event for all concerned.

PLEASE DO NOT RUN EXPERIMENTS ON 350 MILLION AMERICANS

I ask that you carefully consider all comments, and all research called to your attention, and choose to place in effect the Precautionary Principle, to protect us from possible and probable harm. If we only act when the harm is proven, then we have will have actually made the entire population, especially our younger ones, the subject of a vast and terrible experiment on humans.

It seems that there are two main issues, one is cell phones themselves, and the other is mainly cell phone towers as well as other kinds of ambient microwave radiation, such as wireless electric meters. I will try to summarize the issues I am aware of, although I apologize that I do not have the time resources to cite the specific studies for each issue. I will mention some books and websites.

1. The current SARS standards are based on someone with a head size of an 180-pound man, who is holding the cell phone 10mm or so from his ear. However, women and many men have smaller heads and so absorb more radiation. Also, I hardly ever have observed anyone holding their cell phone at a distance from their ear, and when I have tried it, I can't hear. Also, children have even smaller heads, and their

skull bones are softer (i.e., higher water content), so they absorb even more radiation.

2. What has been considered non-ionizing radiation actually does ionize (that is, break electrons from their orbits) when used for longer periods of time. In other words, it is like the damage done to DNA by a burst of x-rays, except the medical x-ray is a very short burst, and the cell phone can do the same when the exposure is for a long period of time.
3. Cell phones at current limits are considered not to heat the brain, but they can. Recent experiments using the live brain of a cow, a typical cell phone, and magnetic resonance imaging showed heating in small patches of the brain, up to 4 degrees Centigrade (over 7 degrees fahrenheit), and that level can damage brain tissue.
4. Even at very low SAR levels, cells are sensitive to microwave frequencies. All living cells—not just nerve cells—have electromagnetic properties. The many, varied and pulsed frequencies of our manmade fields do have cellular effects.
5. Radiation in the vicinity of cell phone towers has detrimental effects on animals, children, and adults. Some countries have recognized the risks described in research studies and now regulate the placement of towers relative to schools, hospitals, and housing. In our country, we've actually made it illegal to consider the proximity to schools and such.

I hate to see that we are rapidly moving toward a wireless system so fast that we are losing our wired infrastructure. We need to take into account the available research and find ways to minimize our risks with respect to microwave radiation. I would be happy to be able to plug in my cell phone, laptop or tablet at wired connections in internet cafes, hotels, schools, and so on. I consider my land line a valuable part of my communication mix. It will be far cheaper to implement precautions now than if we wait. If we do not implement precautions, the cost to retool later will be difficult to even calculate, in dollars and in suffering.

I suggest that you directly ask the EPA to use its research resources at its National Risk Management Research Laboratory to consider these issues and a cost analysis. The healthcare burden of our country should be factored in.

Here are some resources that have informed me.

Books:

Disconnect: The Truth About Cell Phone Radiation, What the Industry Is Doing to Hide It, and How to Protect Your Family, by Dr. Devra Davis - Ph. D., M. P. H.

Electromagnetic Fields: A Consumers Guide to the Issues and How to Protect Ourselves, by B. Blake Levitt

Websites:

www.environmentalhealthtrust.org

www.emrpolicy.org

Here is the press release of May 31, 2011 from International Agency for Research on Cancer/World Health Organization:

In May 2011, The WHO/International Agency for Research on Cancer (IARC) has classified radiofrequency electromagnetic fields as possibly carcinogenic to humans (Group 2B) based on an increased risk for glioma associated with wireless phone use.

From May 24-31 2011, a working group of 31 scientists from 14 countries has been meeting at IARC in Lyon, France to assess the potential carcinogenic hazards from exposure to radiofrequency electromagnetic fields. These assessments will be published as Volume 102 of the IARC Monographs, which will be the fifth volume in this series to focus on physical agents, after Volume 55 (Solar Radiation), Volume 75 and volume 78 on ionizing radiation (X-rays, gamma rays, neutrons, radio nuclides), and Volume 80 on non-ionizing radiation (extremely low frequency electromagnetic fields).

The evidence was reviewed critically, and overall evaluated as being limited among users of wireless telephones for glioma and acoustic neuroma, and inadequate to draw conclusions for other types of cancers. The evidence from the occupational and environmental exposures mentioned above was similarly judged inadequate. The Working Group did not quantitate the risk; however, one study of past cell phone use (up to the year 2004) showed a 40% increased risk for gliomas in the highest category of heavy users (reported average: 30 minutes per day over a 10-year period. Dr. Jonathan Samet (University of Southern California, USA), overall Chairman of the Working Group, indicated that "the evidence, while still accumulating, is strong enough to support a conclusion and the 2B classification.

[2B means, "possibly carcinogenic to humans."]

Respectfully submitted by

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